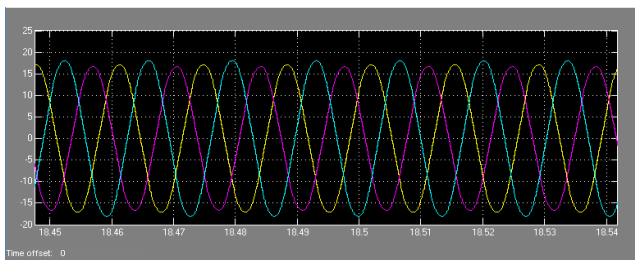
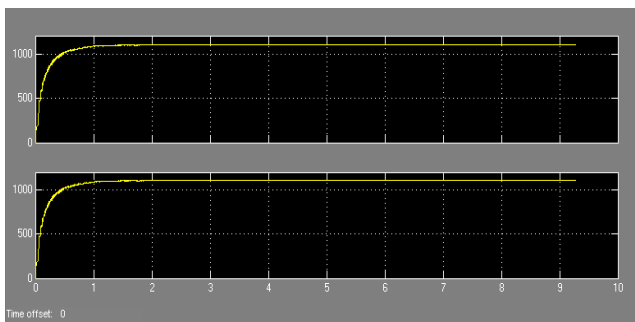


Motor 2 ABC Current Waveform



Motor 1&2 RPM at Constant Speed



8. Conclusion

This project proposes implementation which is capable to operate two Brushless DC Motor (BLDC) using a three phase inverter and controlled by fuzzy logic method. In proposed topology, two c-phases of each motor are connected each other and the rest of the stator windings are connected to three inverter legs and neutral point, respectively, and the conventional 6-bridge inverter is used.

By superposition principle, two motors can work at different speeds as well as at the same speed. The proposed control method includes the command generator which makes current references using superposition and two motors are controlled with minimum voltage.

The proposed topology and its control method are demonstrated through simulation results.

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